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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/828,874	04/21/2004	Shahab M. Sayeedi	CE12986R	5608
22917	7590	06/01/2005	EXAMINER	
MOTOROLA, INC. 1303 EAST ALGONQUIN ROAD IL01/3RD SCHAUMBURG, IL 60196			MEHRA, INDER P	
			ART UNIT	PAPER NUMBER
			2666	

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/828,874	Applicant(s) SAYEEDI, SHAHAB M.	
	Examiner Inder P. Mehra	Art Unit 2666	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to application dated: 4/21/04.

Specification

2. The disclosure is objected to because of the following informalities:
 - a. Refer to all pages (1-12). Attorney's Docket no. "12986R Sayeedi" be replaced by application serial number and its filing date on all pages.
 - b. Following terms or Acronyms have been used in disclosure, without explaining their meaning or explanation, thus not comprehensive:
 - A8 bearer at pages 3 (line 10), 6 (line 25) ;
 - CM service request message at page 6 line 25;
 - A 11- Registration Request, page 6 line 32;
 - A 11- Registration Reply, page 6 line 32;
 - ADDS transfer , page 7 line 9;
 - A 9 Connect-A 8 Message, page 7 line 2;
 - DMHO, page 8 line 1;
 - DRS field, page 8 line 30;
 - RN-PDIT, page 10 line 9

Appropriate correction is required.

Claim Objections

3. Claim 5 is objected to because of the following informalities:

The limitation "The MS is requesting a dormant mode handoff and does not have data *send*". It is not clear. Does it mean that MS does not have data ready to sent or does not have data all to be sent ?

Appropriate correction/clarification is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-19 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- c. Claim 1 recites the limitation "signaling" in line 8. There is insufficient antecedent basis for this limitation in the claim. This is preceded by "signaling" in line 3. Similar problem exists in claims 2-4, 6-9, 11-13, 15-16, 18-23, and 25
- d. Claim 2 recites the limitation "an inter-PDSN handoff" in line 1. There is insufficient antecedent basis for this limitation in the claim. It is preceded by the same limitation in claim 1 line 4. Similar problem exists in claim 24.
- e. Claim 6 recites the limitation "the Signaling Connection Part" in line 3. There is no antecedent basis for this limitation in the claim.
- f. Claims 9-10 recite the limitation "A 11-Session Update message" in lines 2-3. It is not clear as to its meaning in the context of claimed limitation. Similar problem exists in claim 14.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 4-6 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by

Madour et al (US Application Publication No. 2001/0050907), hereinafter, Madour.

For claims 1 and 20, Madour discloses method and access network for an improved inter-PDSN (Packet Data Serving Node) dormant mode handoff ,(performs an intra-BSC/intra-PCF/inter-PDSN dormant handoff, refer to paragraph 0016); comprising:

- **exchanging, by an Access Network (AN) with a target PDSN, signaling to support an inter-PDSN handoff of a packet data session of a mobile station (MS)**, (refer to ~~At~~ step 125, of fig. 9, the MS performs an inter-PDSN dormant handoff. At 126, the packet-data session is reactivated due to the sending of agent advertisements and PPP re-negotiation. The reactivation includes the establishment of an SCCP connection 14 between the MSC 11 and the BSC 12. At 127, the MSC sends a Clear command to the BSC using the SCCP connection. The Clear command includes a cause value "authentication failure". The BSC reacts by clearing the traffic channel at 128, and at 129, sending an A9-Release-A8 message to the

PCF 16. The A9-Release-A8 message includes the cause value "authentication failure", refer to paragraph 0064); also refer to FIG. 6 illustrates the situation in which an inter-BSC/inter-PCF/intra-PDSN dormant handoff is performed from a Source BSC 76 to a Target BSC 77, and from a Source PCF 78 to a Target PCF 79. The MS 13 is served by the same PDSN 18, paragraph 0054); At 130, the PCF reacts by clearing the A8 connection 17 and initiating the closure of the A10 connection 19. This action triggers the PDSN 18 to release the PPP connection at step 131;

- **establishing, by the AN with the MS, a traffic channel (TCH) to support the inter-PDSN handoff,** (refer to "When an MS attempts to use a packet-data service, the MSC and the Base Station Controller (BSC) serving the MS take steps to allocate a radio **traffic channel**, refer to paragraph 0006);
- **determining, by the AN, that signaling between the MS and the target PDSN related to the inter-PDSN handoff has been completed** (the present invention is an MSC in a wireless access network that includes a first signaling means for receiving a message from a BSC indicating that an MS has powered down during a packet-data session; means for determining in the MSC that the packet-data session is dormant; and a second signaling means for sending an

instruction to the BSC to release network resources associated with the packet-data session, refer to paragraph 0017);

- **in response to the determination that signaling has been completed, releasing, by the AN, the TCH, (refer to “If it is determined at step 37 that the packet-data session is dormant, the method moves to step 41 where the MSC updates the location of the MS in the MS's HLR, and then instructs the BSC to **release the traffic and control channels**, refer to paragraph 0040.**

For claim 4, Madour discloses the following limitation:

- wherein releasing the TCH is performed in response to determining, by the AN, that signaling between the MS and the target PDSN related to the inter-PDSN handoff has been completed, that the MS has indicated that it does not have data to send after the dormant mode handoff, and that the AN has not received packet data from the MS after completing the signaling related to the inter-PDSN handoff, refer to paragraphs 0051, 0054, 0064 and claim 8.

For claim 5, Madour discloses the following limitation:

- receiving, by the AN from the MS, an origination message indicating that the MS is requesting a dormant mode handoff and does not have data send; sending, by the AN to the target PDSN, an indication that a

handoff is being performed and the MS does not have data ready to send. (Refer to “during a dormant inter-BSC handoff to the BSC 12, the MS 13 sends a new origination message to the BSC 12 and PCF 16, refer to paragraph 0053, refer to fig. 6).

For claim 6, Madour discloses the following limitation:

- in response to the determination that signaling has been completed, releasing, by the AN, the Signaling Connection Control Part (SCCP) connection between the AN and a mobile switching center (MSC), refer to paragraph 0051.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Madour**, as above, in view of , **Harper et al** (US Application Publication No. 2003/0021252).

For claim 2, Madour discloses all the limitations of subject matter, with the exception of the following limitation, which is disclosed by Harper, as follows:

- wherein signaling to support an inter-PDSN handoff comprises signaling from the group consisting of an A1 l-Registration Request

and an A1 l-Registration Reply, refer to paragraphs 0019,0020 and 0035, and abstract..

It would have been obvious to the person of ordinary skill in the art at the time the invention to use signaling to support an inter-PDSN handoff comprises signaling from the group consisting of an A1 l-Registration Request and an A1 l-Registration Reply, as taught by Harper in the mobile communication system. The capability can be implemented in the access network. The motivation for using signaling to include signaling from the group consisting of an A1 l-Registration Request and an A1 l-Registration Reply being that it provides load balancing technique.

10. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Madour**, as above, in view of , **Perras** (US Application Publication No. 2002/0141369).

For claim 3, Madour discloses all the limitations of subject matter, with the exception of the following limitation, which is disclosed by Perras, as follows:

- wherein signaling related to the inter-PDSN handoff comprises signaling from one or more of the group of signaling types consisting of point-to-point (PPP) connection establishment signaling and mobile internet protocol (MIP) signaling., refer to paragraphs 0050 and 0078, and figs. 2-3.

It would have been obvious to the person of ordinary skill in the art at the time the invention to use one or more of the group of signaling types consisting of point-to-point (PPP) connection establishment signaling and mobile internet protocol (MIP) signaling. The capability

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of one or more of the group of signaling types consisting of point-to-point (PPP) connection establishment signaling and mobile internet protocol (MIP) signaling can be implemented in the access network. The motivation for using signaling to include signaling from the group consisting of PPP or MIP being that it provides load balancing technique.

Allowable Subject Matter

11. Claims 7-19, and 21-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. Claims 7-19 and 21-25 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Prior Art of Record

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

* **Eyuboglu et al** (US Application Patent No. 2004/0214574) discloses a first session establishing a first mobile access terminal on a first radio network controller via a first radio node.

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Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Inder P. Mehra whose telephone number is 571-272-3170. The examiner can normally be reached on Monday through Friday from 8AM to 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Inder P Mehra

Inder P Mehra
Examiner
Art Unit 2666

5/19/05

DM

LANGTON
PRIMARY EXAMINER